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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,885	04/24/2006	Mitsuo Kimura	JFE-06-1071	6151

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IP GROUP OF DLA PIPER LLP (US)
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EXAMINER

FOGARTY, CAITLIN ANNE

ART UNIT	PAPER NUMBER
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1793

NOTIFICATION DATE	DELIVERY MODE
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02/02/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto.phil@dlapiper.com

Office Action Summary	Application No. 10/576,885	Applicant(s) KIMURA ET AL.	
	Examiner CAITLIN FOGARTY	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25,27-29,31,35,36 and 48-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25,27-29,31,35,36 and 48-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 7, 2010 has been entered.

Status of Claims

2. Claims 25, 27 – 29, 31, 35, 36, and 48 – 50 are pending where claim 25 has been amended. Claims 1 – 24, 26, 30, 32 – 34, and 37 – 47 have been cancelled.

Status of Previous Rejections

3. The 35 U.S.C. 103(a) rejection of claims 25, 27 – 29, 31, 35, 36, 48, and 49 as being unpatentable over JP 2002-004009 in view of “Wrought Stainless Steels-Fabrication Characteristics” from the *ASM Handbook* has been withdrawn in view of the amended claims filed January 7, 2010.

The 35 U.S.C. 103(a) rejection of claim 50 as being unpatentable over JP 2002-004009 in view of “Wrought Stainless Steels-Fabrication Characteristics” from the *ASM Handbook* and further in view of “Structure/Property Relationships in Irons and Steels-Role of Microstructure” from *Metals Handbook Desk Edition* has been withdrawn in view of the amended claims filed January 7, 2010.

Art Unit: 1793

The provisional nonstatutory obviousness-type double patenting rejection of claims 25, 27 – 29, 31, 35, 36, 48, and 49 as being unpatentable over claims 24 – 34 of copending Application No. 10/568,154 has been maintained.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 25, 27 – 29, 31, 35, 36, and 48 – 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over the English machine translation of JP 2001-140040 (hereinafter JP'040).

With respect to instant claim 25, [0011]-[0013] of JP '040 disclose a highly corrosion resistant high strength stainless steel pipe for linepipe with an overlapping composition as seen in the table below.

Element	Instant Claim 25 (mass %)	JP '040 (mass %)	Overlapping Range (mass %)
C	0.001 – 0.015	≤ 0.02	0.001 – 0.015
Si	0.01 – 0.5	0 – 1	0.01 – 0.5
Mn	0.1 – 1.8	0 – 1	0.1 – 1
P	≤ 0.03	≤ 0.04	≤ 0.03
S	≤ 0.005	≤ 0.01	≤ 0.005
Cr	15 – 18	11.5 – 15	15
Ni	0.5 – 5.5	2 – 8	2 – 5.5
Mo	0.5 – 3.5	1.5 – 4	1.5 – 3.5
V	0.02 – 0.2	≤ 0.1	0.02 – 0.1
N	0.001 – 0.015	≤ 0.02	0.001 – 0.015
O	≤ 0.006	----	0
Optional			
Al	0.002 – 0.05	0 – 0.1	0.002 – 0.05
Cu	≤ 3.5	0 – 1.2	0 – 1.2
Nb, Ti, Zr, B, W, or Ca	≤ 0.2 Nb ≤ 0.3 Ti ≤ 0.2 Zr ≤ 0.01 B	---- Nb 0 – 0.2 Ti ---- Zr ---- B	0 Nb 0 – 0.2 Ti 0 Zr 0 B

Art Unit: 1793

	$\leq 3.0 \text{ W}$ $\leq 0.01 \text{ Ca}$	--- W --- Ca	0 W 0 Ca
Fe + Impurities	Balance	Balance	Balance

JP '040 also teaches that the stainless steel pipe has a microstructure comprising a ferrite and martensite dual-phase as a base phase. In addition, [0013] of JP '040 discloses that the ferrite content in the steel pipe is 15-40 vol% and the balance is martensite which both overlap with the ranges recited in instant claim 25.

JP '040 differs from instant claim 25 because it teaches that the stainless steel pipe is welded rather than seamless as claimed. However, [0003] of JP '040 discloses that the steel pipe is manufactured as a welded pipe rather than a seamless pipe in order to lower execution cost. Therefore, it would have been obvious to one of ordinary skill in the art to manufacture the stainless steel pipe of JP '040 as a seamless pipe, which is a well known method in the art, with the expectation of increased execution costs.

JP '040 also differs from instant claim 25 because it does not specifically teach equations (1), (2), and (3). However, it is well settled that there is no invention in the discovery of a general formula if it covers a composition described in the prior art, *In re Cooper and Foley* 1943 C.D. 357, 553 O.G. 177; 57 USPQ 117, *Taklatwalla v. Marburg*, 620 O.G. 685, 1949 C.D. 77, and *In re Pilling*, 403 O.G. 513, 44 F(2) 878, 1931 C.D. 75. In the absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary skilled in the art. *In re Austin, et al.*, 149 USPQ 685, 688. Therefore, since the composition of the pipe of JP '040 overlaps with the composition of the instant pipe, it would be

Art Unit: 1793

expected that the pipe of JP '040 would satisfy the limitations of equations (1), (2), and (3).

Finally, JP '040 differs from instant claim 25 because it does not specifically teach that a residual austenite phase is present in an amount of 40% or less. However, one of ordinary skill in the art would have expected the stainless steel pipe of JP '040 to inherently have an amount of residual austenite as a result of the heating and cooling steps in the method of manufacturing the stainless steel pipe of JP '040. See MPEP 2112. For example, one of ordinary skill in the art would expect the presence of an amount of residual austenite in the stainless steel of JP '040 when the steel is cooled and the transformation of austenite to ferrite or austenite to martensite takes place.

Instant claims 27 – 29 and 31 further limit the compositions of Ni, Mo, and Cu. However, the stainless steel composition taught by JP '040 still overlaps with the ranges of Ni, Mo, and Cu recited in instant claims 27 – 29 and 31.

In regards to instant claim 35, [0013] of JP '040 discloses that the stainless steel pipe comprises 15-40 vol% ferrite which overlaps with the range recited in the instant claim.

Regarding instant claims 36 and 49, JP '040 does not specifically teach the presence of residual austenite. However, one of ordinary skill in the art would have expected the stainless steel pipe of JP '040 to inherently have an amount of residual austenite as a result of the heating and cooling steps in the method of manufacturing the stainless steel pipe of JP '040. See MPEP 2112. For example, one of ordinary skill in the art would expect the presence of an amount of residual austenite in the stainless

Art Unit: 1793

steel of JP '040 when the steel is cooled and the transformation of austenite to ferrite or austenite to martensite takes place. Therefore, it would have been obvious to one of ordinary skill in the art that the amount of residual austenite in the stainless steel of JP '040 would vary based on the heating temperature and cooling rate of the steel.

With respect to instant claim 48, [0001] of JP '040 teaches that the stainless steel pipe may be used in oil wells for linepipe. JP '040 does not specifically teach that the pipe is welded together to form the pipeline. However, [0004] of JP '040 teaches that the stainless steel alloy has good weldability. Therefore, it would have been obvious to one of ordinary skill in the art that in order to make a pipeline long enough to transport crude oil, the stainless steel pipes of JP '040 would require welding to join together the individual pipes thereby forming a welded structure.

In regards to instant claim 50, [0035] of JP '040 teaches that the stainless steel pipe has a yield strength of 655 MPa or less which overlaps with the range recited in the instant claim. Furthermore, Tables 2 and 3 of JP '040 contain several specific examples of a stainless steel pipe with a yield strength within the claimed range.

Since the claimed compositional ranges of claims 25, 27 – 29, 31, 35, 36, and 48 – 50 either overlap or are within the ranges disclosed by JP '040, a prima facie case of obviousness exists. See MPEP 2144.05. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the claimed stainless steel pipe composition from the stainless steel pipe composition disclosed by JP '040 because JP '040 teaches the same utility (i.e. use in oil wells) in the whole disclosed range.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 25, 27 – 29, 31, 35, 36, 48, and 49 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 24 – 34 of copending Application No. 10/568,154. Although the conflicting claims are not identical, they are not patentably distinct from each other because the composition and microstructure of the high strength stainless steel seamless pipe recited in 10/568,154 overlaps in scope with the composition and microstructure of the stainless steel seamless pipe recited in claims 25, 27 - 29, 31, 35, 36, 48, and 49 of the instant application. Also, the values of equations (1) and (2) of the instant application overlap with the values of equations (1) and (2) recited in 10/568,154. Furthermore, the instant recited equation (3) would be satisfied by the steel of 10/568,154 since the composition of the steel of 10/568,154 overlaps with the composition of the steel of the

Art Unit: 1793

instant claims. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the claimed stainless steel pipe alloy composition from the stainless steel pipe alloy composition disclosed by 10/568,154 because 10/568,154 teaches the same utility (i.e. pipes to hold oil) in the whole disclosed range.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

8. Applicant's arguments with respect to claims 25, 27 – 29, 31, 35, 36, and 48 – 50 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAITLIN FOGARTY whose telephone number is (571)270-3589. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/
Supervisory Patent Examiner, Art
Unit 1793

CF